

IN THE CLAIMS:

1. (Currently Amended) A semiconductor inspection method comprising steps of:

extracting data representing adjacent lines of a logical circuit of a semiconductor apparatus represented by layout data, which have a possibility of for avoiding a short circuit occurring between the such lines from a layout pattern of a semiconductor;

simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0"; and

monitoring an output of a logical circuit which receives the input logical values, and comparing the monitored output with an output logical value which is expected when the input logical values are input to the logical circuit.

2. (Currently Amended) A semiconductor inspection method comprising steps of:

extracting data representing adjacent lines of a logical circuit of a semiconductor apparatus represented by layout data, a distance between said lines being equal to or less than a threshold, from layout data of a semiconductor as adjacent lines;

simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0"; and

monitoring an output of a logical circuit which receives the input logical values, and comparing the monitored output with an output logical value which is expected when the input logical values are input to the logical circuit.

Serial No.: 09/557,088

3. (Currently Amended) A computer-readable recording medium comprising which records a program for making causing a computer the execute steps of:

extracting data representing adjacent lines of a logical circuit of a semiconductor apparatus represented by layout data, which said adjacent lines having have a possibility of a short circuit occurring between the such lines from a layout pattern of a semiconductor;

simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0"; and

monitoring an output of a logical circuit which that receives the input logical values, and comparing the monitored output with an output logical value which that is expected when the input logical values are input to the logical circuit.

Serial No.: 09/557,088

4. (Currently Amended) A computer-readable recording medium comprising which records a recorded program for making causing a computer to execute steps of:

extracting data representing adjacent lines of a logical circuit of a semiconductor apparatus represented by layout data, a distance between said lines being equal to or less than a threshold, from layout data of a semiconductor as adjacent lines;

simultaneously detecting any stuck-at failures in the logical circuit and obtaining input logical values from the logical circuit such that extracted data representing one of the adjacent lines has a logical value "1" while extracted data representing the other of the adjacent lines has a logical value "0"; and

monitoring an output of a logical circuit which receives the input logical values, and comparing the monitored output with an output logical value which is expected when the input logical values are input to the logical circuit.